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**FEB 19 2006**

**IN THE UNITED STATES PATENT**  
**AND TRADEMARK OFFICE**

Applicants: JÜRGEN REINOLD,  
ET AL.

**Serial No.: 09/944,893**

**Title: Vehicle Active Network  
with Data Encryption**

**Filed: August 31, 2001**

Group Art Unit: 2132

Examiner: Cas P. Stulberger

I hereby certify that this correspondence is being transmitted via facsimile to 571-273-8300 on 19 February 2006 addressed to:

Board of Patent Appeals and Interferences  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

*Indica falcata*

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Indira Saladi

## REPLY BRIEF UNDER 37 C.F.R. § 41.41

Board of Patent Appeals and Interferences  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Sir:**

Pursuant to the Examiner's Answer dated 19 December 2005 in connection with the above-identified patent application, the applicants respectfully submit the instant Reply Brief in accordance with 37 C.F.R. § 41.41.

SERIAL NO. 09/944,893  
REPLY BRIEF

ATTY. DOCKET NO. IA00008

**A. Arguments Re: Pogue Jr. in view of "Towards an Active Network Architecture" by David L. Tennenhouse**

In the Examiner's Answer mailed 19 December 2005, the Examiner submitted a new ground of rejection of claims 1-7, 9-12, and 15 as rejected under 35 U.S.C. 103(a) as being unpatentable over Pogue Jr. (U.S. Patent No. 5,995,512) in view of "Towards an Active Network Architecture" by David L. Tennenhouse.

The examiner alleged that Pogue Jr. discloses a data network capable of transmitting audio, video, data, low-bandwidth control data, and other similar signals. First and second device limitations are alleged to be met by the disclosure of a CD player and an audio processor/amplifier coupled to the network. The examiner noted that Pogue Jr. does not disclose encrypting the data or an active network. The examiner finds that Tennenhouse discloses an active network and, additionally, encryption. The examiner alleges that it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the vehicle network as disclosed by Pogue Jr. with the method of encrypting packets being sent in an active network as disclosed by Tennenhouse in order to allow the network to perform customized computation on the user data.

Knowing that Pogue Jr. does not teach an active network, then to establish a *prima facie* case of obviousness, and hence to find the claims 1-7, 9-12, and 15 unpatentable under 35 U.S.C. § 103(a), three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. The teaching or suggestion to make

SERIAL NO. 09/944,893  
REPLY BRIEF

ATTY. DOCKET NO. IA00008

the claimed combination and the reasonable expectation of success must both be found in the prior art, and not be based upon applicant's disclosure. MPEP at § 2142.

The examiner has conceded that Pogue Jr. does not teach an active network and does not teach encrypting the data. What is not taught or suggested in the art, and what the art does not establish, is a suggestion or motivation to use an active network in a vehicle and further to perform encrypting the data in a vehicle. That comes only from the applicants' own specification, and to conclude such is inappropriate hindsight.

Careful analysis of the cited references reveals no suggestion or motivation to modify or replace a network used in a vehicle with an active network and to perform encrypting the data in a vehicle. There is no suggestion of any deficiency in the network disclosed by Pogue Jr. that would be overcome by the use of an active network or any benefit to be gained by using an active network. Further, there is no suggestion of any deficiency in the network disclosed by Pogue Jr. that would be overcome by the use of an active network with security for encrypting data. Nor does the Tennenhouse reference suggest use of an active network in a vehicle. It is only by the applicants' disclosure that one is first taught to make the combination of a vehicle and an active network. The examiner has failed to point to the motivation or suggestion contained within the references or the art for making the modification or combination. MPEP § 2142. Because there is no suggestion or motivation in the references themselves to combine a vehicle and an active network, it follows that claims 1-7, 9-12, and 15 are patentable.

Further, even if a motivation to combine the two references can be found, there is no expectation of success. For example, one of ordinary skill in the art would find combining Pogue's passive network with Tennenhouse's active network to be ludicrous because doing so would defeat the advantages inherent in the active network. Thus,

SERIAL NO. 09/944,893  
REPLY BRIEF

ATTY. DOCKET NO. IA00008

there is no expectation of success to combine the Pogue Jr. reference with Tennenhouse.

Further, even if a motivation to combine the two references can be found and there is a reasonable expectation of success, the combination fails to disclose or suggest the claimed invention. The combination discloses a star topology data bus utilizing a master controller, (Pogue Jr., Fig. 1, abstract and col. 7, lines 62-67) with an active network (Tennenhouse, page 1, left column, introduction, second paragraph). The combination does not disclose or even suggest a vehicle comprising a first device, a second device and an active network communicatively coupling the first and second devices where the active network encrypts data. Applicants' claimed invention requires an active network where nodes (active elements) in the network are programmed to perform custom operations on the messages that pass through the node; thus active elements within an active network enable multiple simultaneous communication paths between devices within the network (page 7, lines 6-7 of Applicant's specification). This is in stark contrast to the passive network-types disclosed by Pogue Jr. where the network is only aware of the destination of the messages passing through the network nodes and are designed to deliver exactly one substantially unmodified copy of the message to the ultimate destination. Further, this is in stark contrast to the active network of Tennenhouse where no vehicle application is disclosed.

The applicants state that there is no motivation to form the alleged combination, that there is no reasonable expectation of success, and that the combination fails to disclose or suggest the claimed invention including, *inter alia*, methods of secure data communication in a vehicle including an active network.

SERIAL NO. 09/944,893  
REPLY BRIEF

ATTY. DOCKET NO. IA00008

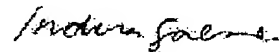
As such, the Board is asked to reverse and vacate the rejections of the claims, in view of the discussion above, with instructions for the examiner to allow said claims to issue in a United States Patent without further delay and provide other relief warranted.

**B. Arguments Re: Pogue Jr. in view of "Towards an Active Network Architecture" by David L. Tennenhouse in further view of Daniels**

In the Examiner's Answer mailed 19 December 2005, the Examiner submitted a new ground of rejection of claims 8, 13, and 14 as rejected under 35 U.S.C. 103(a) as being unpatentable over Pogue Jr. (U.S. Patent No. 5,995,512) in view of "Towards an Active Network Architecture" by David L. Tennenhouse as applied to claims 1-7, 9-12, and 15 and in further view of Daniels et al. (U.S. Patent No. 5,991,401).

In addition to the remarks above, Applicants note that Daniels is not directed to vehicle applications so that even if it had disclosed an active network one of ordinary skill in the art would not be motivated to incorporate the disclosed active network architecture in a vehicle. Thus, the examiner has used impermissible hindsight to reconstruct Applicants' claimed invention. As such, the Board is asked to reverse and vacate the rejections of the claims, in view of the discussion above, with instructions for the examiner to allow said claims to issue in a United States Patent without further delay and provide other relief warranted.

Respectfully submitted,



Motorola, Inc.

By: \_\_\_\_\_

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